combining of the first and the second experience matrices may comprise at least one, two, three, four, five or six operations from the group of

[0245] adding sparse vectors to an experience matrix thus increasing the number of vectors,

[0246] concatenation of sparse vectors with corresponding sparse vectors thus increasing the number of vector elements,

[0247] interlacing vectors and vector elements,

[0248] element-by-element addition of vectors to corresponding vectors,

[0249] a weighted summation of elements of corresponding experience matrix elements, and

[0250] a subtraction of corresponding elements of experience matrices.

[0251] In phase **1540**, an incremental experience matrix corresponding to another experience matrix may be formed. The incremental experience matrix may comprise special data of at least one system or apparatus. The special data may be related to a restricted context, for example in the sense of time or topic, or the people that the experience matrix relates to. For example, an incremental experience matrix may be formed using a backup or snapshot of an experience matrix, for example by subtracting the backup or snapshot experience matrix from a later experience matrix, the later experience matrix being a different version of said backup or snapshot experience matrix.

[0252] In phase **1545**, the combined experience matrix may be received or sent over a communications connection to be used in another system or apparatus than where said combined experience matrix was formed.

[0253] In phase **1550**, the combined experience matrix may be provided to be accessible at a communication interface, e.g. in a network service so that it can be downloaded or accessed in another way.

[0254] In phase **1555**, at least a part of at least one sparse vector of the combined experience matrix is accessed to form a prediction output. The resulting combined matrix may be stored in the same apparatus that accesses the matrix, or at another device, for example in a network service. The accessing may comprise e.g. determining a close match for a sparse vector, or otherwise determining corresponding sparse vector (s) in the combined experience matrix. The forming of the prediction output may happen similarly as explained earlier for a general experience matrix. The accessing may take place across a communications connection.

[0255] For example, a set of words describing at least a current context of a user system may be formed, for example describing previously and currently visited web sites. The combined experience matrix may be used for determining at least one prediction of a web address relevant to the set of words. As another example, a set of words describing at least a current context of a user system may be formed, describing for example applications residing in the system. The combined experience matrix may be used for determining at least one prediction of an executable application relevant to the set of words.

[0256] In phase **1560**, a system may be controlled or adapted in response to or by using the prediction output from phase **1555**. For example, the user interface of a system may be altered or controlled by using the prediction output. The user interface may be that of an apparatus or that of a web service. A system may also be controlled or adapted in another manner, e.g. prediction output may be used to recommend websites (addresses) to the user so that the user may find relevant information from the websites in the current context. A system may also be adapted so that it finds or recommends relevant applications to be downloaded or installed onto the system. The recommending of websites or applications may happen at a user device or at a web service (server device).

[0257] For example, at least one web address may be provided to a user for example as a recommendation by displaying recommended web sites. In addition or instead, a search engine search may be performed or created in web content based on the prediction of a web address. As another example, at least one prediction of an application may be provided to a user for example as a recommendation by displaying recommended applications. Accessing or providing access to downloading or purchasing an application from an application store may be made possible or performed based on said prediction of an executable application.

[0258] In phase **1570**, an experience matrix may be uploaded to app store or downloading an experience matrix from an app store.

[0259] An experience matrix based prediction may be used for recommending a web address. In this embodiment, a user may receive news, feeds and advertising suggestions based on user's past activity, location and time. Basically an aspect that is supported as a word in an experience matrix may be used as a parameter when deciding what is relevant for a particular user. Data that is stored into an experience matrix may be used to filter relevant information. The user may not need search or go through existing feeds sent to him/her to find what he/she wants. In addition user may not need to manually enter or input anything. Relevant words may be extracted from the experience matrix based on the given context.

[0260] Based on contextual information (location, time, sensors, previous visited pages etc.) a random index based algorithm calculates the most relevant words for the user in the given context as explained earlier with FIGS. **1** to **12**. These words are used as filtering words for search at the server side. The client device will send these words to a network server. The server is able to collect news and social feeds from multiple Internet sources. Based on words received from the client device the server will filter news and social feeds and select a limited number of news and feeds that will be delivered to client.

[0261] As these news and feeds have been filtered using words that are relevant for end user most of the news and feeds should be relevant for end user in the context where he/she is.

[0262] A client device may take care of collecting and maintaining the context data in the experience matrix. Client device may be able to extract most relevant words for a given context from the experience matrix. This list of keywords may be based for example on sensor data (such as movement), time of the day, location etc.

[0263] After the client has collected relevant words it may send the words to server that is located in the network. A network server is used as it may have more bandwidth and processing power. A network server may collect news and social feeds from a variety of different network sources like twitter, facebook, bbc.com, cnn.com etc.

[0264] When a server receives a word list from the client it may start filtering the news and social feeds based on these words. It may select the news and feeds so that they provide best fit to the word list provided by the client. After the server has completed filtering it may return a list of filtered news/